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A CATALOGUE OF THE TYPES IN THE COLLECTIONS OF
MUSEO CIVICO DI STORIA NATURALE DI MILANO.

IX. TYPES OF *DIPTERA DROSOPHILIDAE*

Abstract. — Fifty-three type specimens of 33 species of *Drosophilidae* are present in the Bezzi collection of the Natural History Museum of Milan. The species are alphabetically listed, with the data of the type specimens and some comments. *Stegana bakeri* Sturtevant is transferred to the genus *Leucophenga*.

Key words: Types, *Drosophilidae*, Museo Milano.

Riassunto. — *Catalogo dei Tipi del Museo Civico di Storia Naturale di Milano. IX. I Tipi dei Diptera Drosophilidae.*

Nella collezione Bezzi, conservata presso il Museo Civico di Storia Naturale di Milano, sono conservati 53 Tipi di *Drosophilidae* appartenenti a 33 specie. Le specie sono elencate in questo lavoro in ordine alfabetico, con i dati riguardanti gli esemplari tipici e alcuni commenti. *Stegana bakeri* Sturtevant è trasferita al genere *Leucophenga*.

Introduction.

The collection of Professor Mario Bezzi, one of the leading dipterists of the first half of this century, is now kept in the Natural History Museum of Milan. The *Drosophilidae* section contains the type material of 33 species, 3 of them described by Bezzi himself, 20 by Sturtevant and 10 by three other authors, based on Bezzis collection or sent to him as a gift. There are 12 holotypes, 1 neotype, 17 paratypes and 23 syntypes. The species originate mainly from the Philippines, from North America and from Africa. All specimens are in the original order as left by Bezzi.

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Of the following five species described by Bezzi or based on Bezzis collection no type specimens were found: *Drosophila megaspis* Bezzi, 1907; *Drosophila trilimbata* Bezzi, 1928; *Drosophila zebrina* Bezzi, 1928; *Amiota flavithorax* Duda, 1939; *Drosophila trichiaspis* Duda, 1940.

In the following list the genera and species are alphabetically arranged. For each species the original name, the type locality, the extant type specimens and the main part of the labels of these specimens are given. Comments are added where appropriate, including one new combination.

I wish to thank Dr. Carlo Leonardi of the Natural History Museum of Milan for the permission to work in the collection as well as for his help and cordial hospitality.

List of species.

1. *Amiota albodorsata* Sturtevant, 1927, *Philipp. J. Sci.*, 32:362. *Loc. typ.*: Los Baños, Laguna Province, Luzon, Philippine Islands. *Holotype* ♀: Los Baños, P.I., Baker. The ovipositor shows a row of strong teeth, atypical for an *Amiota* species.

2. *Amiota leucophengoides* Sturtevant, 1927, *Philipp. J. Sci.*, 32:363. *Loc. typ.*: Batbatan Island, Philippine Islands. *Holotype* ♂: Batbatan Isl., R. C. McGregor.

3. *Drosophila* (*Paradrosophila*) *acuta* Sturtevant, 1927, *Philipp. J. Sci.*, 32:370. *Loc. typ.*: Mount Maquiling, Luzon, Philippine Islands. *Holotype* ♀: Mt. Makiling, Luzon, Baker.

4. *Drosophila alfari* Sturtevant, 1921, *Carnegie Inst. Wash. Publ.*, 301:75. *Loc. typ.*: San José, Costa Rica. 1 *paratype* ♂: San José, Costa Rica, March 1915.

5. *Drosophila* (*Spinulophila*) *balneorum* Sturtevant, 1927, *Philipp. J. Sci.*, 32:369. *Loc. typ.*: Los Baños, Laguna Province, Luzon. 1 *paratype* ♀: Mt. Makiling, Luzon, Baker.

6. *Drosophila bicolor* var. *punctipennis* Duda, 1940, *Annls hist.-nat. Mus. natn. hung.*, 33:29. *Loc. typ.*: Bartberton (sic!), 15.5.14, H. K. Munro. *Holotype* (?) ♀: East London, 5.5.23, H. K. Munro. In spite of the different labelling I consider this specimen to be the one used by Duda as basis for the description. This species was considered to be a synonym of *Lissocephala unipunctum* Malloch, but, the specimen being a female, the specific identity is difficult to verify (personal communication of Dr. L. Tsacas).

7. *Drosophila bilimbata* Bezzi, 1928, *Diptera Brachycera Anthericia Fiji Is.*, p. 159. *Loc. typ.*: Lautoka Mts., 11.iv.1920. 2 *paratypes* (δ and ♀): W. Greenwood, Mountains Lautoka, Fiji, 11/4/20. Considered as subspecies of *D. sulfurigaster* (Duda).

8. *Drosophila cardini* Sturtevant, 1916, *Ann. ent. Soc. Am.*, 9:336. *Loc. typ.*: Havana, Cuba. 1 *paratype* δ : Havana, Cuba, Jan. Feb. 1915.

9. *Drosophila caribea* Sturtevant, 1916, *Ann. ent. Soc. Am.*, 9:335. *Loc. typ.*: Havana, Cuba. 1 *paratype* ♀ : Havana, Cuba, Jan. Feb. 1915. This is a synonym of *D. ananassae* Doleschall.

10. *Drosophila elongata* Sturtevant, 1927, *Philipp. J. Sci.*, 32:372. *Loc. typ.*: Los Baños, Laguna Province, Luzon, Philippine Islands. *Holotype* δ : Los Baños, P.I., Baker.

11. *Drosophila finitima* var. *gracilipes* Duda, 1940, *Annls hist.-nat. Mus. natn. hung.*, 33:39. *Loc. typ.*: E. London and Rodriguez I. 1 *syn-type*: E. London, Lightfoot, July 1914. Considered as a synonym of *D. latifasciaeformis* Duda.

12. *Drosophila hirtiscutellata* Sturtevant, 1927, *Philipp. J. Sci.*, 32:372. *Loc. typ.*: Mount Maquiling, Luzon, Philippine Island. *Holotype* δ : Mt. Makiling, Luzon, Baker.

13. *Drosophila hydei* Sturtevant, 1921, *Carnegie Inst. Wash. Publ.*, 301:101. *Loc. typ.*: Lakeland, Florida. 1 *paratype* ♀ : Stock, Lakeland, Fla., 1919 / Gonotype.

14. *Drosophila immigrans* Sturtevant, 1921, *Carnegie Inst. Wash. Publ.*, 301:83. *Loc. typ.*: White Plains, New York. 1 *paratype* ♀ : Stock, White Plains, N.Y., 1919 / Gonotype.

15. *Drosophila (Spinuophila) immigrans formosana* Sturtevant, 1927, *Philipp. J. Sci.*, 32:368. *Loc. typ.*: Taihoku, Formosa. 1 *paratype* δ : Taihoku, Formosa, Mar. '24. This is a synonym of *D. formosana* Duda.

16. *Drosophila melanica* Sturtevant, 1916, *Ann. ent. Soc. Am.*, 9:332. *Loc. typ.*: Kushla, Alabama. 1 *paratype* δ : Kushla, Ala., Stock, δ , A. H. Sturtevant / Gonotype.

17. *Drosophila (Spinulophila) monochaeta* Sturtevant, 1927, *Philipp. J. Sci.*, 32:368. *Loc. typ.*: Mount Maquiling, Luzon, Philippine Islands. *Holotype* δ : Mt. Makiling, Luzon, Baker.

18. *Drosophila mulleri* Sturtevant, 1921, *Carnegie Inst. Wash. Publ.*, 301:101. *Loc. typ.*: Houston, Texas. 1 *paratype* δ : Houston, Tex., 1915.

19. *Drosophila plagiata* Bezzi, 1908, *Denkschr. med. Ges. Jena*, 13:197. *Loc. typ.*: ... aus der Ebene der Halbinsel des Kap der guten Hoffnung. 11 *syntypes* (2 ♂♂ and 9 ♀♀): Capo Africa. 3 *syntypes* ♂♂: *D. plagiata* Bezzi ♂, Paratype.
20. *Drosophila plurilineata* Villeneuve, 1911, *Wien. ent. Ztg.*, 30:83. *Loc. typ.*: Paris, Déc. 1910, Jan. 1911. 6 *syntypes* (3 ♂♂ and 3 ♀♀): Paris, I. 1911. This is a synonym of *D. busckii* Coquillett.
21. *Drosophila quadrimaculata* var. *sexilineata* Duda, 1940, *Annls hist.-nat. Mus. natn. hung.*, 33:36. *Loc. typ.*: Ghinda Mochi, XII. 16, and Ac. E. L. 12 (Kapstadt). 1 *syntype* ♂: Ac.-E.-L., 12. 1 *syntype* ♀: Ghinda, Mochi. XII. 16. Considered as species.
22. *Drosophila robusta* Sturtevant, 1916, *Ann. ent. Soc. Am.*, 9:331. *Loc. typ.*: Kushla, Alabama. 1 *paratype* ♂: Kushla, Ala., Stock, ♂, A. H. Sturtevant / Gonotype.
23. *Drosophila (Spinulophila) rubra* Sturtevant, 1927, *Philipp. J. Sci.*, 32:369. *Loc. typ.*: Mount Maquiling, Luzon, Philippine Islands. *Holotype* ♂: Mt. Makiling, Luzon, Baker.
24. *Drosophila simulans* Sturtevant, 1919, *Psyche (Boston)*, 26:153. *Loc. typ.*: Lakeland, Fla. 1 *paratype* ♂: Lakeland, Fla., Stock / Gonotype.
25. *Drosophila takahashii* Sturtevant, 1927, *Philipp. J. Sci.*, 32:371. *Loc. typ.*: Taihoku, Formosa. 1 *paratype*: Taihoku, Formosa / R. Takahashi, Mar. '24.
26. *Drosophila virilis* Sturtevant, 1916, *Ann. ent. Soc. Am.*, 9:330. *Loc. typ.*: New York, N.Y. 1 *paratype* ♀: New York, N.Y., Stock, A. H. Sturtevant, ♀ / Gonotype.
27. *Gitona distans* Bezzi, 1924, *Ann. Mag. nat. Hist.*, Ser. 9, 14:255. *Loc. typ.*: Cyprus. 1 *paratype* ♀: Cyprus, 11.IX.23, D.S. Wilkinson, from figs.
28. *Leucophenga bezzii* Sturtevant, 1927, *Philipp. J. Sci.*, 32:364. *Loc. typ.*: Mount Maquiling, Luzon, Philippine Islands. *Holotype* ♀: Mt. Makiling, Luzon, Baker.
29. *Leucophenga dudai* Bächli, 1971, *Exploration du Parc National de l'Upemba*, Fasc. 71, p. 64. *Loc. typ.*: Congo belge: P.N.U., Lusinga (1760 m). 1 *paratype* ♂: Barberton, Worcester, 20.5.14, H. K. Munro.
30. *Leucophenga munroi* Duda, 1939, *Annls hist.-nat. Mus. natn. hung.*, 32:45. *Loc. typ.*: Barberton, 27.5.13, H. K. Munro. *Neotype* ♂: Barberton, 2.5.13, H. K. Munro.

31. *Stegana bakeri* Sturtevant, 1927, *Philipp. J. Sci.*, 32:363. *Loc. typ.*: Mount Maquiling, Luzon, Philippine Islands. *Holotype* ♂: Mt. Makiling, Luzon, Baker. This species was included by Sturtevant in *Stegana* mainly because of the bent down wings. I assume this to be an artifact. The specimen shows many characters found in *Leucophenga albofasciata* Macquart, particularly the narrow and bare third abdominal tergite. Therefore this species is here transferred to *Leucophenga* (NEW COMBINATION).

32. *Zaprionus (Phorticella) bakeri* Sturtevant, 1927, *Philipp. J. Sci.*, 32:366. *Loc. typ.*: Mount Maquiling, Luzon, Philippine Islands. *Holotype* ♂: Mt. Makiling, Luzon, Baker. The head is missing. This species is transferred to *Phorticella*.

33. *Zaprionus multistriata* Sturtevant, 1927, *Philipp. J. Sci.*, 32:365. *Loc. typ.*: Mount Maquiling, Luzon, Philippine Islands. *Holotype* ♀: Mt. Makiling, Luzon, Baker. This species is transferred to *Phorticella*, but its systematic and nomenclatural status is not clear.

Systematic Index.

The species are alphabetically arranged, with their actual generic combination and the number given in the list.

<i>acuta</i> Sturtevant, 1927 (<i>Drosophila</i>)	3	<i>immigrans</i> Sturtevant, 1921 (<i>Drosophila</i>)
<i>albodorsata</i> Sturtevant, 1927 (<i>Amiota</i>)	1	<i>melanica</i> Sturtevant, 1916 (<i>Drosophila</i>)
<i>alfari</i> Sturtevant, 1921 (<i>Drosophila</i>)	4	<i>leucophengoides</i> Sturtevant, 1927 (<i>Amiota</i>)
<i>bakeri</i> Sturtevant, 1927 (<i>Leucophenga</i>)	31	<i>monochaeta</i> Sturtevant, 1927 (<i>Drosophila</i>)
<i>bakeri</i> Sturtevant, 1927 (<i>Phorticella</i>)	32	<i>mulleri</i> Sturtevant, 1921 (<i>Drosophila</i>)
<i>baheorum</i> Sturtevant, 1927 (<i>Drosophila</i>)	5	<i>multistriata</i> Sturtevant, 1927 (<i>Phorticella</i>)
<i>bezzii</i> Sturtevant, 1927 (<i>Leucophenga</i>)	28	<i>munroi</i> Duda, 1939 (<i>Leucophenga</i>)
<i>bilimbata</i> Bezzi, 1928 (<i>Drosophila</i>)	7	<i>plagiata</i> Bezzi, 1908 (<i>Drosophila</i>)
<i>cardini</i> Sturtevant, 1916 (<i>Drosophila</i>)	8	<i>phurilineata</i> Villeneuve, 1911 (<i>Drosophila</i>)
<i>caribea</i> Sturtevant, 1916 (<i>Drosophila</i>)	9	<i>punctipennis</i> Duda, 1940 (<i>Lissocephala</i>)
<i>distans</i> Bezzi, 1924 (<i>Gitona</i>)	27	<i>robusta</i> Sturtevant, 1916 (<i>Drosophila</i>)
<i>dudai</i> Bächli, 1961 (<i>Leucophenga</i>)	29	<i>rubra</i> Sturtevant, 1927 (<i>Drosophila</i>)
<i>elongata</i> Sturtevant, 1927 (<i>Drosophila</i>)	10	<i>sexilineata</i> Duda, 1940 (<i>Drosophila</i>)
<i>formosana</i> Sturtevant, 1927 (<i>Drosophila</i>)	15	<i>simulans</i> Sturtevant, 1919 (<i>Drosophila</i>)
<i>gracilipes</i> Duda, 1940 (<i>Drosophila</i>)	11	<i>takahashii</i> Sturtevant, 1927 (<i>Drosophila</i>)
<i>hirtiscutellata</i> Sturtevant, 1927 (<i>Drosophila</i>)	12	<i>virilis</i> Sturtevant, 1916 (<i>Drosophila</i>)
<i>hydei</i> Sturtevant, 1921 (<i>Drosophila</i>)	13	